



International Civil Aviation Organization

**Fifth Meeting of Aeronautical Telecommunication Network (ATN)
Transition Task Force of APANPIRG**

Phuket, Thailand, 9-13 June 2003

Agenda Item 8: Review status of implementation of AFTN circuits, evaluated circuit capacity and consider timescale for transition to ATN

AFTN CIRCUIT STATISTICS OF TOKYO

Summary

This information paper presents the latest AFTN circuit statistics of Tokyo AFTN Center. According to this loading statistics, it is necessary for Tokyo/Moscow circuit to be upgraded.

(Prepared by Japan)

1 Introduction

1.1 AFTN circuit loading statistics for March, April and May at Tokyo AFTN Center were analyzed. Details of the circuit loadings are provided in the attachment.

1.2 As a result of this analysis, it was recognized that the loading level of Tokyo/Moscow circuit was significantly high and that the circuit should be upgraded. Tokyo/Singapore circuit was upgraded on 15 Jan 2003, and as a result the problem between Japan and Singapore has been resolved.

2 Coordination

2.1 The output loadings of Tokyo-Moscow circuit at peak hours were between 50% and 80% each month, and input loadings at peak hours were between 10% and 28.5%. The modulation rate of this circuit is 200 baud.

2.2 At the CNS/MET/SG/6 meeting held in Bangkok on 15-19 Jul 2002, Japan and the Russian Federation agreed that each state would coordinate on a technical solution to upgrade the Tokyo/Moscow circuit from 200 baud to 2400bps by the end of 2003. In accordance with this agreement, in September 2002 Japan provided the Russian Federation with a proposal to upgrade the Tokyo/Moscow circuit from 200 baud to 9600bps through a 64kbps satellite circuit.

3 Action by the meeting

3.1 The meeting is invited to recognize the status of these statistics.

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Salt Lake | | | | LOCATION INDICATOR : KSLC | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 3.0% | | | OUTPUT : 1.0% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 227,890 | 5.4% | 2,925,329 | 2.9% | 44,083 | 1.0% | 709,047 | 0.7% |
| 2 March 2003 | 231,056 | 5.5% | 2,970,475 | 2.9% | 49,589 | 1.1% | 708,601 | 0.7% |
| 3 March 2003 | 234,842 | 5.6% | 2,997,184 | 2.9% | 61,701 | 1.4% | 909,976 | 0.9% |
| 4 March 2003 | 241,986 | 5.7% | 3,008,033 | 2.9% | 53,515 | 1.2% | 765,397 | 0.7% |
| 5 March 2003 | 356,891 | 8.5% | 3,543,516 | 3.5% | 124,724 | 2.9% | 1,682,216 | 1.6% |
| 6 March 2003 | 241,307 | 5.7% | 3,062,041 | 3.0% | 121,518 | 2.8% | 1,591,176 | 1.5% |
| 7 March 2003 | 223,890 | 5.3% | 2,861,602 | 2.8% | 46,780 | 1.1% | 715,333 | 0.7% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Salt Lake | | | | LOCATION INDICATOR : KSLC | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 2.6% | | | OUTPUT : 0.6% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 197,017 | 4.7% | 2,545,316 | 2.5% | 57,278 | 1.3% | 788,033 | 0.7% |
| 2 April 2003 | 215,116 | 5.1% | 2,591,451 | 2.5% | 48,223 | 1.1% | 690,021 | 0.6% |
| 3 April 2003 | 228,257 | 5.4% | 2,551,799 | 2.5% | 44,822 | 1.0% | 723,819 | 0.7% |
| 4 April 2003 | 219,586 | 5.2% | 2,748,632 | 2.7% | 50,649 | 1.2% | 708,643 | 0.7% |
| 5 April 2003 | 222,602 | 5.3% | 2,666,665 | 2.6% | 45,642 | 1.0% | 609,604 | 0.6% |
| 6 April 2003 | 185,163 | 4.4% | 2,640,060 | 2.6% | 38,240 | 0.9% | 596,010 | 0.5% |
| 7 April 2003 | 239,204 | 5.7% | 2,799,367 | 2.7% | 53,733 | 1.2% | 709,627 | 0.7% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Salt Lake | | | | LOCATION INDICATOR : KSLC | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 2.5% | | | OUTPUT : 0.6% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 193,785 | 4.6% | 2,512,161 | 2.4% | 58,022 | 1.3% | 718,475 | 0.7% |
| 2 May 2003 | 204,576 | 4.8% | 2,574,899 | 2.5% | 50,899 | 1.2% | 690,261 | 0.6% |
| 3 May 2003 | 205,644 | 4.9% | 2,467,398 | 2.4% | 41,564 | 0.9% | 607,499 | 0.6% |
| 4 May 2003 | 192,383 | 4.5% | 2,381,352 | 2.3% | 46,881 | 1.1% | 632,790 | 0.6% |
| 5 May 2003 | 211,290 | 5.0% | 2,632,702 | 2.6% | 42,931 | 1.0% | 643,773 | 0.6% |
| 6 May 2003 | 228,433 | 5.4% | 2,527,302 | 2.5% | 49,997 | 1.1% | 725,331 | 0.7% |
| 7 May 2003 | 234,844 | 5.6% | 2,611,421 | 2.5% | 56,342 | 1.3% | 791,941 | 0.7% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Singapore | | | | LOCATION INDICATOR : WSSS | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 1.6% | | | OUTPUT : 0.8% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 110,951 | 2.6% | 1,690,036 | 1.7% | 55,109 | 1.3% | 824,613 | 0.8% |
| 2 March 2003 | 123,989 | 3.0% | 1,549,142 | 1.5% | 46,684 | 1.1% | 748,197 | 0.7% |
| 3 March 2003 | 107,702 | 2.6% | 1,573,131 | 1.6% | 59,494 | 1.4% | 916,020 | 0.9% |
| 4 March 2003 | 99.851 | 2.4% | 1,215,945 | 1.2% | 65,971 | 1.6% | 806,739 | 0.8% |
| 5 March 2003 | 133,670 | 3.2% | 1,696,540 | 1.7% | 64,936 | 1.5% | 912,013 | 0.9% |
| 6 March 2003 | 142,039 | 3.4% | 2,149,173 | 2.1% | 63,341 | 1.5% | 903,239 | 0.9% |
| 7 March 2003 | 116,695 | 2.8% | 1,587,495 | 1.6% | 49,174 | 1.2% | 806,052 | 0.8% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|----------------|-------------|------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Singapore | | | | LOCATION INDICATOR : WSSS | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBEROF AHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 1.6% | | | OUTPUT : 0.7% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 129,859 | 3.1% | 1,756,073 | 1.7% | 75,508 | 1.8% | 840,847 | 0.8% |
| 2 April 2003 | 108,028 | 2.6% | 1,613,560 | 1.6% | 43,875 | 1.0% | 813,582 | 0.8% |
| 3 April 2003 | 100,263 | 2.4% | 1,629,182 | 1.6% | 45,627 | 1.1% | 750,828 | 0.7% |
| 4 April 2003 | 157,924 | 3.8% | 1,671,923 | 1.7% | 47,539 | 1.1% | 782,836 | 0.8% |
| 5 April 2003 | 109,788 | 2.6% | 1,472,919 | 1.5% | 39,746 | 0.9% | 687,747 | 0.7% |
| 6 April 2003 | 104,419 | 2.5% | 1,515,353 | 1.5% | 47,539 | 1.1% | 676,530 | 0.7% |
| 7 April 2003 | 111,758 | 2.7% | 1,553,788 | 1.5% | 56,584 | 1.4% | 736,392 | 0.7% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Singapore | | | | LOCATION INDICATOR : WSSS | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 1.5% | | | OUTPUT : 0.7% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 107,364 | 2.6% | 1,593,214 | 1.6% | 51,121 | 1.2% | 677,108 | 0.7% |
| 2 May 2003 | 103,839 | 2.5% | 1,510,985 | 1.5% | 42,911 | 1.0% | 666,788 | 0.7% |
| 3 May 2003 | 86,296 | 2.1% | 1,380,843 | 1.4% | 42,864 | 1.0% | 647,593 | 0.6% |
| 4 May 2003 | 88,684 | 2.1% | 1,299,825 | 1.3% | 39,547 | 0.9% | 631,580 | 0.6% |
| 5 May 2003 | 101,314 | 2.4% | 1,416,357 | 1.4% | 41,241 | 1.0% | 641,106 | 0.6% |
| 6 May 2003 | 108,413 | 2.6% | 1,546,335 | 1.5% | 54,704 | 1.3% | 809,333 | 0.8% |
| 7 May 2003 | 116,947 | 2.8% | 1,522,047 | 1.5% | 49,408 | 1.2% | 772,821 | 0.8% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|-------------------|----------------|--------------------------------|----------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Hong Kong | | | | LOCATION INDICATOR : VHHH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.7% | | | OUTPUT : 1.2% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 42,072 | 1.0% | 681,569 | 0.6% | 87,235 | 2.0% | 1,177,347 | 1.1% |
| 2 March 2003 | 47,342 | 1.1% | 832,691 | 0.6% | 73,947 | 1.7% | 1,080,383 | 1.0% |
| 3 March 2003 | 49,600 | 1.1% | 703,923 | 0.6% | 83,707 | 1.9% | 1,248,858 | 1.2% |
| 4 March 2003 | 53,195 | 1.2% | 763,347 | 0.7% | 72,341 | 1.7% | 1,031,145 | 1.0% |
| 5 March 2003 | 65,334 | 1.5% | 997,362 | 0.9% | 107,757 | 2.5% | 1,579,207 | 1.5% |
| 6 March 2003 | 62,440 | 1.4% | 877,010 | 0.8% | 90,757 | 2.1% | 1,439,265 | 1.4% |
| 7 March 2003 | 39,906 | 0.9% | 662,410 | 0.6% | 86,042 | 2.0% | 1,127,629 | 1.1% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|-------------------|----------------|---|----------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR <input type="checkbox"/> RJAA | | | | |
| CORRESPONDENT STATION : Hong Kong | | | | LOCATION INDICATOR <input type="checkbox"/> VHHH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS <input type="checkbox"/> One | | | | |
| AVERAGE LOADING | | INPUT : 0.6% | | | OUTPUT : 1.0% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 63,490 | 1.5% | 761,799 | 0.7% | 77,312 | 1.8% | 1,143,546 | 1.1% |
| 2 April 2003 | 43,845 | 1.0% | 698,128 | 0.6% | 71,484 | 1.7% | 1,075,208 | 1.0% |
| 3 April 2003 | 45,509 | 1.0% | 707,846 | 0.7% | 71,651 | 1.7% | 1,027,417 | 1.0% |
| 4 April 2003 | 43,941 | 1.0% | 665,619 | 0.6% | 98,363 | 2.3% | 1,075,947 | 1.0% |
| 5 April 2003 | 63,415 | 1.5% | 660,689 | 0.6% | 68,023 | 1.6% | 941,751 | 0.9% |
| 6 April 2003 | 32,205 | 0.7% | 553,299 | 0.5% | 62,988 | 1.5% | 933,444 | 0.9% |
| 7 April 2003 | 40,194 | 0.9% | 654,900 | 0.6% | 87,924 | 2.0% | 986,479 | 0.9% |

AFTN CIRCUIT LOADING STATISTICS

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|-----------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Hong Kong | | | | LOCATION INDICATOR : VHHH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.6% | | | OUTPUT : 1.0% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 52,760 | 1.2% | 707,471 | 0.7% | 71,398 | 1.7% | 1,013,813 | 1.0% |
| 2 May 2003 | 54,372 | 1.2% | 768,650 | 0.7% | 67,832 | 1.6% | 973,858 | 0.9% |
| 3 May 2003 | 57,281 | 1.3% | 613,637 | 0.6% | 62,169 | 1.4% | 877,254 | 0.8% |
| 4 May 2003 | 39,500 | 0.9% | 582,156 | 0.5% | 58,262 | 1.3% | 809,848 | 0.8% |
| 5 May 2003 | 38,532 | 0.9% | 592,842 | 0.5% | 68,400 | 1.6% | 937,996 | 0.9% |
| 6 May 2003 | 45,399 | 1.0% | 618,260 | 0.6% | 63,716 | 1.5% | 1,031,591 | 1.0% |
| 7 May 2003 | 74,639 | 1.7% | 790,856 | 0.7% | 93,252 | 2.2% | 1,100,568 | 1.0% |

AFTN CIRCUIT LOADING STATISTICS

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|-------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Seoul | | | | LOCATION INDICATOR : RKSS | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.0% | | | OUTPUT : 1.3% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 6,229 | 0.1% | 53,709 | 0.0% | 87,195 | 2.0% | 1,343,974 | 1.3% |
| 2 March 2003 | 5,952 | 0.1% | 56,706 | 0.0% | 95,183 | 2.2% | 1,329,938 | 1.3% |
| 3 March 2003 | 5,631 | 0.1% | 54,436 | 0.0% | 106,487 | 2.5% | 1,508,637 | 1.5% |
| 4 March 2003 | 29,373 | 0.7% | 83,279 | 0.0% | 92,855 | 2.2% | 1,331,681 | 1.3% |
| 5 March 2003 | 6,545 | 0.1% | 64,984 | 0.0% | 104,276 | 2.4% | 1,445,778 | 1.4% |
| 6 March 2003 | 5,925 | 0.1% | 71,433 | 0.0% | 101,502 | 2.4% | 1,464,628 | 1.4% |
| 7 March 2003 | 4,705 | 0.1% | 60,535 | 0.0% | 90,203 | 2.1% | 1,264,890 | 1.2% |

AFTN CIRCUIT LOADING STATISTICS

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|-------------------------------|---------------------------|-------------------|----------------|--------------------------------|----------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Seoul | | | | LOCATION INDICATOR : RKSS | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.0% | | | OUTPUT : 1.2% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 39,684 | 0.9% | 83,586 | 0.0% | 94,773 | 2.2% | 1,330,180 | 1.3% |
| 2 April 2003 | 3,474 | 0.0% | 46,982 | 0.0% | 90,640 | 2.1% | 1,213,932 | 1.2% |
| 3 April 2003 | 3,646 | 0.0% | 44,727 | 0.0% | 84,900 | 2.0% | 1,170,147 | 1.1% |
| 4 April 2003 | 4,000 | 0.0% | 46,175 | 0.0% | 88,209 | 2.1% | 1,265,839 | 1.2% |
| 5 April 2003 | 3,921 | 0.0% | 44,252 | 0.0% | 83,614 | 1.9% | 1,157,267 | 1.1% |
| 6 April 2003 | 4,538 | 0.1% | 48,224 | 0.0% | 77,782 | 1.8% | 1,143,281 | 1.1% |
| 7 April 2003 | 4,568 | 0.1% | 55,739 | 0.0% | 89,866 | 2.1% | 1,255,953 | 1.2% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|-------------------------------|---------------------------|-------------------|----------------|------------------|--------------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | | LOCATION INDICATOR : RJAA | | | |
| CORRESPONDENT STATION : Seoul | | | | | LOCATION INDICATOR : RKSS | | | |
| MODULATION RATE : 9600 bps | | | | | TOTAL NUMBER OF CAHNNELS : One | | | |
| AVERAGE LOADING | | INPUT : 0.0% | | | OUTPUT : 1.1% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 15,163 | 0.3% | 68,085 | 0.0% | 86,271 | 2.0% | 1,254,546 | 1.2% |
| 2 May 2003 | 5,197 | 0.1% | 47,920 | 0.0% | 81,008 | 1.9% | 1,212,630 | 1.2% |
| 3 May 2003 | 6,496 | 0.1% | 54,390 | 0.0% | 80,711 | 1.9% | 1,085,303 | 1.0% |
| 4 May 2003 | 4,170 | 0.0% | 50,510 | 0.0% | 81,264 | 1.9% | 1,096,435 | 1.0% |
| 5 May 2003 | 5,851 | 0.1% | 53,822 | 0.0% | 94,532 | 2.2% | 1,270,290 | 1.2% |
| 6 May 2003 | 24,195 | 0.5% | 125,595 | 0.1% | 88,785 | 2.1% | 1,204,854 | 1.1% |
| 7 May 2003 | 15,608 | 0.3% | 120,627 | 0.1% | 99,810 | 2.3% | 1,303,921 | 1.2% |

AFTN CIRCUIT LOADING STATISTICS

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|------------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Khavarovsk | | | | LOCATION INDICATOR : UHHH | | | | |
| MODULATION RATE : 2400 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.4% | | | OUTPUT : 1.9% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 17,763 | 2.0% | 83,547 | 0.4% | 25,397 | 2.9% | 368,923 | 1.7% |
| 2 March 2003 | 20,928 | 2.4% | 88,883 | 0.4% | 29,916 | 3.4% | 388,017 | 1.8% |
| 3 March 2003 | 16,418 | 1.9% | 100,158 | 0.4% | 31,341 | 3.6% | 479,835 | 2.3% |
| 4 March 2003 | 19,634 | 2.2% | 102,057 | 0.4% | 32,312 | 3.7% | 415,288 | 2.0% |
| 5 March 2003 | 16,684 | 1.9% | 96,305 | 0.4% | 28,469 | 3.2% | 363,024 | 1.7% |
| 6 March 2003 | 16,683 | 1.9% | 80,975 | 0.3% | 29,239 | 3.3% | 387,546 | 1.8% |
| 7 March 2003 | 17,077 | 1.9% | 82,904 | 0.3% | 27,492 | 3.1% | 371,642 | 1.7% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|------------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Khavarovsk | | | | LOCATION INDICATOR : UHHH | | | | |
| MODULATION RATE : 2400 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.3% | | | OUTPUT : 1.6% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 17,321 | 2.0% | 85,476 | 0.4% | 22,850 | 2.6% | 339,876 | 1.6% |
| 2 April 2003 | 17,741 | 2.0% | 89,934 | 0.4% | 31,290 | 3.6% | 349,636 | 1.6% |
| 3 April 2003 | 16,977 | 1.9% | 82,162 | 0.3% | 34,253 | 3.9% | 300,551 | 1.4% |
| 4 April 2003 | 17,088 | 1.9% | 77,773 | 0.3% | 26,380 | 3.0% | 322,272 | 1.5% |
| 5 April 2003 | 17,822 | 2.0% | 71,651 | 0.3% | 25,279 | 2.9% | 347,953 | 1.6% |
| 6 April 2003 | 15,873 | 1.8% | 71,360 | 0.3% | 22,493 | 2.6% | 363,971 | 1.7% |
| 7 April 2003 | 17,423 | 2.0% | 79,225 | 0.3% | 24,448 | 2.8% | 381,378 | 1.8% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|------------------------------------|---------------------------|----------------|-------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Khavarovsk | | | | LOCATION INDICATOR : UHHH | | | | |
| MODULATION RATE : 2400 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | INPUT : 0.3% | | | OUTPUT□ 1.4% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 13,865 | 1.6% | 59,319 | 0.2% | 21,359 | 2.4% | 266,617 | 1.2% |
| 2 May 2003 | 12,867 | 1.4% | 67,031 | 0.3% | 18,039 | 2.0% | 263,299 | 1.2% |
| 3 May 2003 | 13,862 | 1.6% | 58,530 | 0.2% | 32,235 | 3.7% | 304,100 | 1.4% |
| 4 May 2003 | 14,466 | 1.6% | 60,199 | 0.2% | 24,815 | 2.8% | 331,968 | 1.6% |
| 5 May 2003 | 13,497 | 1.5% | 66,934 | 0.3% | 33,134 | 3.8% | 364,183 | 1.7% |
| 6 May 2003 | 14,875 | 1.7% | 72,434 | 0.3% | 26,589 | 3.0% | 314,586 | 1.5% |
| 7 May 2003 | 16,981 | 1.9% | 73,656 | 0.3% | 22,675 | 2.6% | 306,386 | 1.4% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|--------------------------------|---------------------------|-------------------|----------------|------------------|--------------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | | LOCATION INDICATOR : RJAA | | | |
| CORRESPONDENT STATION : Moscow | | | | | LOCATION INDICATOR : UUUU | | | |
| MODULATION RATE : 200 bauds | | | | | TOTAL NUMBER OF CAHNNELS : One | | | |
| AVERAGE LOADING INPUT : 6.1% | | | | | OUTPUT : 39.2% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 10,854 | 15.0% | 84,480 | 4.8% | 60,363 | 83.8% | 646,617 | 37.4% |
| 2 March 2003 | 7,425 | 10.3% | 77,883 | 4.5% | 43,238 | 60.0% | 584,050 | 33.7% |
| 3 March 2003 | 13,318 | 18.4% | 108,122 | 6.2% | 45,044 | 62.5% | 738,463 | 42.7% |
| 4 March 2003 | 8,830 | 12.2% | 82,606 | 4.7% | 44,674 | 62.0% | 717,250 | 41.5% |
| 5 March 2003 | 20,580 | 28.5% | 184,257 | 10.6% | 44,619 | 61.9% | 658,826 | 39.1% |
| 6 March 2003 | 20,113 | 27.9% | 108,276 | 6.2% | 41.122 | 57.1% | 690,212 | 39.9% |
| 7 March 2003 | 10,454 | 14.5% | 100,577 | 5.8% | 51,014 | 70.8% | 717,881 | 41.5% |

AFTN CIRCUIT LOADING STATISTICS

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|--------------------------------|---------------------------|----------------|-------------|-------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR □RJAA | | | | |
| CORRESPONDENT STATION : Moscow | | | | LOCATION INDICATOR □UUUU | | | | |
| MODULATION RATE : 200 bauds | | | | TOTAL NUMBER OF CAHNNELS □One | | | | |
| AVERAGE LOADING | | INPUT : 5.4 | | | OUTPUT : 39.2□ | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 17,465 | 24.2% | 121,044 | 7.0% | 67,452 | 93.6% | 741,077 | 42.8% |
| 2 April 2003 | 16,465 | 22.8% | 120,061 | 6.9% | 55,523 | 77.1% | 701,799 | 40.6% |
| 3 April 2003 | 11,066 | 15.3% | 78,418 | 4.5% | 37,946 | 52.7% | 617,971 | 35.7% |
| 4 April 2003 | 12,190 | 16.9% | 92,642 | 5.3% | 50,110 | 69.5% | 676,245 | 39.1% |
| 5 April 2003 | 7,412 | 10.2% | 83,446 | 4.8% | 58,327 | 81.0% | 675,951 | 39.1% |
| 6 April 2003 | 6,078 | 8.4% | 61,428 | 3.5% | 48,671 | 67.7% | 615.726 | 35.6% |
| 7 April 2003 | 12,654 | 17.5% | 99,147 | 5.7% | 50,446 | 70.0% | 723,907 | 41.8% |

AFTN CIRCUIT LOADING STATISTICS

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|--------------------------------|---------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Moscow | | | | LOCATION INDICATOR : UUUU | | | | |
| MODULATION RATE : 200 bauds | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 4.2% | | OUTPUT : 34.9% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 6,262 | 8.6% | 54,569 | 3.1% | 56,813 | 78.6% | 588,108 | 34.0% |
| 2 May 2003 | 8,921 | 12.3% | 79,227 | 4.5% | 40,871 | 56.7% | 683,772 | 39.5% |
| 3 May 2003 | 4,924 | 6.8% | 53,223 | 3.0% | 54,320 | 75.4% | 612,708 | 35.4% |
| 4 May 2003 | 8,990 | 12.4% | 75,432 | 4.3% | 36,465 | 50.6% | 518,836 | 30.0% |
| 5 May 2003 | 8,094 | 11.2% | 84,900 | 4.9% | 41,445 | 57.5% | 598,409 | 34.6% |
| 6 May 2003 | 8,283 | 11.5% | 75,944 | 4.3% | 42,599 | 59.1% | 622,574 | 36.0% |
| 7 May 2003 | 10,575 | 14.6% | 97,219 | 5.6% | 42,446 | 58.9% | 604,583 | 34.9% |

AFTN CIRCUIT LOADING STATISTICS

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|---------------------------------|---------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Beijing | | | | LOCATION INDICATOR : ZBBB | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.3% | | OUTPUT : 0.9% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 40,672 | 0.9% | 391,675 | 0.3% | 66,926 | 1.5% | 945,791 | 0.9% |
| 2 March 2003 | 37,476 | 0.8% | 370,229 | 0.3% | 69,022 | 1.6% | 876,246 | 0.8% |
| 3 March 2003 | 46,694 | 1.1% | 341,675 | 0.3% | 69,986 | 1.6% | 956,542 | 0.9% |
| 4 March 2003 | 41,154 | 0.9% | 400,937 | 0.3% | 67,488 | 1.6% | 973,560 | 0.7% |
| 5 March 2003 | 34,360 | 0.8% | 390,006 | 0.3% | 85,345 | 2.0% | 938,622 | 0.9% |
| 6 March 2003 | 44,511 | 1.0% | 383,050 | 0.3% | 79,879 | 1.9% | 984,253 | 0.9% |
| 7 March 2003 | 43,054 | 1.0% | 388,691 | 0.3% | 75,925 | 1.8% | 939,363 | 0.9% |

AFTN CIRCUIT LOADING STATISTICS

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|---------------------------------|--------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Beijing | | | | LOCATION INDICATOR : ZBBB | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.3% | | OUTPUT : 0.8% | | | |
| DATE | AFTN CENTER/STATIONINPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 43,698 | 1.0% | 419,375 | 0.4% | 61,659 | 1.4% | 889,331 | 0.8% |
| 2 April 2003 | 31,277 | 0.7% | 395,506 | 0.3% | 66,176 | 1.5% | 888,643 | 0.8% |
| 3 April 2003 | 37,619 | 0.8% | 389,042 | 0.3% | 74,927 | 1.7% | 884,958 | 0.8% |
| 4 April 2003 | 32,840 | 0.7% | 403,865 | 0.4% | 67,482 | 1.6% | 955,171 | 0.9% |
| 5 April 2003 | 34,546 | 0.8% | 370,592 | 0.3% | 60,697 | 1.4% | 807,458 | 0.8% |
| 6 April 2003 | 33,744 | 0.8% | 366,572 | 0.3% | 49,863 | 1.1% | 769,486 | 0.7% |
| 7 April 2003 | 40,794 | 0.9% | 383,819 | 0.3% | 66,004 | 1.5% | 866,898 | 0.8% |

AFTN CIRCUIT LOADING STATISTICS

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|---------------------------------|---------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Beijing | | | | LOCATION INDICATOR : ZBBB | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.3% | | OUTPUT : 0.7% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 35,258 | 0.8% | 331,815 | 0.3% | 57,596 | 1.3% | 837,529 | 0.8% |
| 2 May 2003 | 29,823 | 0.7% | 317,347 | 0.3% | 58,010 | 1.3% | 812,502 | 0.8% |
| 3 May 2003 | 27,688 | 0.6% | 317,032 | 0.3% | 66,190 | 1.5% | 749,033 | 0.7% |
| 4 May 2003 | 34,852 | 0.8% | 296,271 | 0.2% | 51,887 | 1.2% | 634,052 | 0.6% |
| 5 May 2003 | 27,109 | 0.6% | 278,407 | 0.2% | 60,429 | 1.4% | 709,614 | 0.7% |
| 6 May 2003 | 37,999 | 0.9% | 365,457 | 0.3% | 76,116 | 1.8% | 764,800 | 0.7% |
| 7 May 2003 | 33,922 | 0.8% | 304,864 | 0.3% | 63,952 | 1.5% | 806,367 | 0.8% |

AFTN CIRCUIT LOADING STATISTICS

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|------------------------------|---------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Naha | | | | LOCATION INDICATOR : ROAH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.0% | | OUTPUT : 0.9% | | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 March 2003 | 4,882 | 0.1% | 25,021 | 0.0% | 64,710 | 1.5% | 968,766 | 0.9% |
| 2 March 2003 | 3,683 | 0.0% | 22,559 | 0.0% | 78,228 | 1.8% | 923,227 | 0.9% |
| 3 March 2003 | 3,466 | 0.0% | 25,662 | 0.0% | 73,863 | 1.7% | 935,833 | 0.9% |
| 4 March 2003 | 3,863 | 0.0% | 24,771 | 0.0% | 57,569 | 1.3% | 807,367 | 0.8% |
| 5 March 2003 | 3,135 | 0.0% | 25,762 | 0.0% | 85,505 | 2.0% | 921,759 | 0.9% |
| 6 March 2003 | 3,525 | 0.0% | 25,630 | 0.0% | 68,649 | 1.6% | 991,323 | 0.9% |
| 7 March 2003 | 3,108 | 0.0% | 27,091 | 0.0% | 70,226 | 1.6% | 903,838 | 0.8% |

AFTN CIRCUIT LOADING STATISTICS

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|------------------------------|---------------------------|----------------|--------------|--------------------------------|----------------------------|----------------|-------------|---------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Naha | | | | LOCATION INDICATOR : ROAH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.0% | | | OUTPUT : 0.8% | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 April 2003 | 4,985 | 0.1% | 25,021 | 0.0% | 60,803 | 1.4% | 944,397 | 0.9% |
| 2 April 2003 | 1,716 | 0.0% | 19,050 | 0.0% | 70,700 | 1.6% | 892,600 | 0.8% |
| 3 April 2003 | 3,208 | 0.0% | 27,807 | 0.0% | 67,243 | 1.6% | 882,314 | 0.8% |
| 4 April 2003 | 3,076 | 0.0% | 26,655 | 0.0% | 61,080 | 1.4% | 919,213 | 0.9% |
| 5 April 2003 | 1,638 | 0.0% | 15,797 | 0.0% | 51,733 | 1.2% | 867,804 | 0.8% |
| 6 April 2003 | 2,403 | 0.0% | 20,863 | 0.0% | 62,919 | 1.7% | 870,197 | 0.8% |
| 7 April 2003 | 2,251 | 0.0% | 24,160 | 0.0% | 62,673 | 1.4% | 924,570 | 0.9% |

AFTN CIRCUIT LOADING STATISTICS

| | | | | | | | | |
|------------------------------|---------------------------|-------------------|----------------|--------------------------------|----------------------------|-------------------|----------------|------------------|
| ORIGINATING STATION : Tokyo | | | | LOCATION INDICATOR : RJAA | | | | |
| CORRESPONDENT STATION : Naha | | | | LOCATION INDICATOR : ROAH | | | | |
| MODULATION RATE : 9600 bps | | | | TOTAL NUMBER OF CAHNNELS : One | | | | |
| AVERAGE LOADING | | | INPUT : 0.0% | | | OUTPUT : 0.8% | | |
| DATE | AFTN CENTER/STATION INPUT | | | | AFTN CENTER/STATION OUTPUT | | | |
| | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY | PEAK HOURLY | PERCENT HOURLY | TOTAL DAILY | PERCENT DAILY |
| 1 May 2003 | 9,593 | 0.2% | 36,587 | 0.0% | 58,443 | 1.3% | 901,940 | 0.8% |
| 2 May 2003 | 4,019 | 0.0% | 28,915 | 0.0% | 55,513 | 1.3% | 874,039 | 0.8% |
| 3 May 2003 | 2,033 | 0.0% | 16,732 | 0.0% | 57,429 | 1.3% | 843,051 | 0.8% |
| 4 May 2003 | 4,218 | 0.1% | 24,937 | 0.0% | 55,215 | 1.3% | 845,931 | 0.8% |
| 5 May 2003 | 3,417 | 0.0% | 33,043 | 0.0% | 57,005 | 1.3% | 860,686 | 0.8% |
| 6 May 2003 | 3,732 | 0.0% | 24,352 | 0.0% | 73,387 | 1.7% | 959,318 | 0.9% |
| 7 May 2003 | 2,294 | 0.0% | 23,802 | 0.0% | 60,898 | 1.4% | 917,651 | 0.9% |